

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

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15 October 1999

Ms. Ana Townsend
Site Cleanup Unit
California Regional Water Quality Control Board
Los Angeles Region
320 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Quarterly Progress Report for July to September 1999
For the Jervis B. Webb Company Property at
5030 Firestone Boulevard, South Gate, California
(RWQCB SLIC File No. 744; EKI 961025.04)

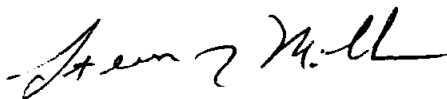
Dear Ms. Townsend:

On behalf of Jervis B. Webb Company of California ("Webb"), Erler & Kalinowski, Inc. is pleased to submit the enclosed *Quarterly Progress Report for July to September 1999*, dated 13 October 1999. This report describes the activities completed at the Webb property located at 5030 Firestone Boulevard in South Gate during the period from July through September 1999.

Please contact us if you have any comments or questions.

Very truly yours,

ERLER & KALINOWSKI, INC.



Steven G. Miller, P.E. (CE, Cert. 43419)
Project Manager

cc: Mr. Chris Webb, Esq., Jervis B. Webb Company

Quarterly Progress Report for July to September 1999

Jervis B. Webb Company Property
5030 Firestone Boulevard
South Gate, California

13 October 1999

**Erler &
Kalinowski, Inc.**

Consulting Engineers and Scientists
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Jervis B. Webb Company Property
5030 Firestone Boulevard, South Gate, California
Quarterly Progress Report for July to September 1999

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Jervis B. Webb Company Property
5030 Firestone Boulevard, South Gate, California
Quarterly Progress Report for July to September 1999

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1. INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") has prepared this *Quarterly Progress Report for July to September 1999* for the property located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, California Avenue (collectively referred to as the "Site," see Figure 1). The principal objectives of the activities performed during this quarter were to (1) monitor the groundwater wells at the Site and (2) continue activities related to installation of a soil vapor extraction system at the Site. The work documented in this report was performed of behalf of the Jervis B. Webb Company ("Webb"). The property at 5030 Firestone Boulevard is owned by Webb ("Webb property") and the adjacent property at 9301 Rayo Avenue is owned by Reliable Steel Building Products, Inc. ("Reliable Steel").

The quarterly groundwater monitoring activities described herein were performed in accordance with EKI's *Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property* ("Sampling Plan"), dated 29 September 1998.

The following activities have been performed on behalf of Webb to investigate areas of environmental concern at the Site since October 1997:

- Installation of soil borings and collection of soil samples;
- Installation of five groundwater monitoring wells (MW-1 – MW-5);
- Installation of eight soil vapor monitoring and extraction wells;
- Removal of on-site clarifier;
- Collection of groundwater elevation data from the on-site groundwater monitoring wells;
- Collection and analysis of groundwater samples from the existing five groundwater monitoring wells and from former monitoring wells DIAL MW-4 and DIAL MW-5;
- Collection of soil data using cone penetrometer testing;
- Collection and analysis of groundwater samples utilizing using Hydropunch sampling; and
- Collection and analysis of shallow soil gas samples.

The results of EKI's previous investigations were reported in the following documents:

- *Phase II Soil Investigation Report*, 18 February 1998;
- *Phase II Groundwater Investigation Report*, 30 June 1998;
- *Additional Groundwater Investigation and Quarterly Monitoring Report for October to December 1998*, 13 January 1999;
- *Quarterly Progress Report for January to March 1999*, 4 June 1999; and
- *Quarterly Progress Report for April to June 1999*, 30 July 1999.

2. QUARTERLY GROUNDWATER MONITORING

2.1. Measurements of Groundwater Elevation

The depth to groundwater in monitoring wells MW-1 through MW-5 was measured on 29 July, 1 September, and 23 September 1999 (see Figure 2 for well locations). These data are provided in Table 1. The depth to the groundwater table beneath the Site is approximately 43 ft bgs. Contours representing the elevation of the groundwater table on 29 July, 1 September, and 23 September 1999 are shown on Figures 3, 4, and 5, respectively. As inferred from the contours shown on these figures, the primary direction of groundwater flow in the groundwater table aquifer beneath the Site appears to be toward the south.

2.2. Groundwater Sampling

2.2.1. Groundwater Sampling Procedures

Prior to sampling of groundwater, each well was purged of a minimum of three well-casing volumes of groundwater using a submersible, electric pump. Groundwater purging was performed by West Hazmat and groundwater samples were collected by EKI. All down-hole equipment was thoroughly steam cleaned before use at each well.

During purging of groundwater on 1 September 1999, groundwater quality parameters were recorded by EKI (temperature, pH, conductivity, and turbidity). The instruments used for monitoring groundwater quality were calibrated prior to commencement of groundwater purging. For each purge sample, the time, water quality parameters, and volume of purged groundwater were recorded on forms in the field (see Appendix A). Purging at each well was continued until groundwater quality parameters stabilized to within approximately 10%. Groundwater quality parameters were generally stable after purging three casing volumes of water from each well. Final turbidity was generally low, between 0.14 and 4.15 nephelometric turbidity units (see Appendix A).

Groundwater samples were collected by EKI using disposable polyethylene bailers. A new bailer was used to sample each well. A sample label that included a unique sample identification number, the time, and the date when the sample was collected was attached to each sample container. Sample containers were sealed in zip-lock plastic bags and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Chain-of-Custody forms were initiated in the field and included with the samples. Laboratory reports and Chain-of-Custody forms for groundwater samples are attached in Appendix B.

2.2.2. Analytical Results for Groundwater Samples

Samples of groundwater were collected from monitoring wells MW-1 through MW-5 on 1 September 1999. In addition, a duplicate sample of groundwater was collected from well MW-5 on 1 September 1999. All samples of groundwater were submitted to Orange Coast Analytical, Inc., in Tustin, California, for analyses of volatile organic compounds ("VOCs") using EPA Method 8260. The analytical results for groundwater samples collected during this monitoring event are summarized in Table 2.

Trichloroethene ("TCE"), tetrachloroethene ("PCE"), cis- and trans- 1,2-dichloroethene ("c-1,2-DCE" and t-1,2-DCE"), 1,1-dichloroethene ("1,1-DCE"), and 1,1-dichloroethane ("1,1-DCA"), and were detected in the samples of groundwater collected from groundwater monitoring wells MW-1 through MW-5 on 1 September 1999. The analytical results for the samples of groundwater collected during this monitoring event were similar to the results of previous groundwater monitoring at the Site, with the following exception:

- 1,2-dichloroethane ("1,2-DCA") was not detected in any of the groundwater samples collected on 1 September 1999, whereas, 1,2-DCA was detected in samples of groundwater collected from wells MW-3, MW-4, and MW-5 during the June 1999 groundwater sampling event. It is possible that the detection of 1,2-DCA in the groundwater samples collected during June 1999 was the result of contamination introduced during sampling or analysis.
- No chemicals were detected in the groundwater sample collected from monitoring well MW-4 for the first time since quarterly groundwater sampling began in November 1998. Well MW-4 is the furthest downgradient of the five groundwater monitoring wells at the Site.

As mentioned in the *Phase II Groundwater Investigation Report* by EKI, dated 30 June 1998, benzene and xylenes were detected in the samples of groundwater collected from former off-site wells DIAL MW-4 and DIAL MW-5 (Dial Corporation). These chemicals have not been detected in any of the samples of groundwater collected from the monitoring wells at the Site.

2.2.3. Quality Assurance/Quality Control for Groundwater Chemical Analyses

Standard laboratory QA/QC procedures used for the project included analyses of matrix spikes, matrix spike duplicates, a quality control check spike sample, and a method blank. The percent recoveries of the matrix spike, matrix spike duplicate, and the quality control check spike sample were within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. QA/QC results are provided with the laboratory reports in Appendix B.

EKI also collected a duplicate groundwater sample from well MW-5 (see Table 2). The two samples collected from MW-5 had the same four analytes present above detection limits. The relative percentage differences ("RPDs") for these analytes ranged from 0 to 8.7 for three of the four analytes. The RPD for the detections of 1,1-DCE is 53.2. These RPDs indicate that an acceptable sampling and analytical reproducibility exists.

3. SOIL REMEDIATION

3.1. Vapor Well Installation

During the second quarter of 1999, West HazMat Drilling Corporation (“West HazMat”) installed vapor wells that will be used for monitoring and extraction of soil vapor at the Site, as described in EKI’s *Quarterly Progress Report for April to June 1999* (see Figure 4). The boring logs and well construction logs for these wells are provided in Appendix C.

3.2. Planned Activities for Next Quarter

During the fourth quarter of 1999, Webb plans to begin operation of a soil vapor extraction (“SVE”) system at the Site. A discussion of progress on all activities performed at the site from October through December 1999 will be included in the next quarterly report.

4. SUMMARY

Gauging of the depth to the groundwater table was performed at the groundwater monitoring wells at the Site on 29 July, 1 September, and 23 September 1999. Quarterly groundwater sampling was performed at the groundwater monitoring wells at the Site on 1 September 1999. The direction of groundwater flow appears to be predominantly toward the south under both the Webb and Reliable Steel properties. This estimated direction of groundwater flow is consistent with previous groundwater monitoring at the Site.

Chemical analyses of groundwater samples collected during this monitoring event detected PCE, c-1,2-DCE, t-1,2-DCE, 1,1-DCA, and 1,1-DCE. The detected concentrations of TCE were generally higher than the concentrations of the other VOCs detected in each sample. The results of these analyses are generally consistent with prior sampling and analysis of groundwater collected at the Site. The highest concentration of TCE was detected in the sample of groundwater collected from well MW-1 (32,000 µg/l) near the building on the Webb property. TCE was not present above the detection limit in the groundwater sample collected from well MW-4, which is located downgradient of the Reliable Steel property.

TABLE 1

Groundwater Elevations in Monitoring Wells

Quarterly Progress Report for July to September 1999

Jervis B. Webb Company, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-1	2/27/98	106.09	44.79	61.30	
	3/2/98	106.09	44.82	61.27	
	3/4/98	106.09	44.58	61.51	
	4/8/98	106.09	44.57	61.52	
	5/20/98	106.09	43.99	62.10	
	10/8/98	106.09	43.38	62.71	
	11/5/98	106.09	43.14	62.95	
	12/21/98	106.09	43.37	62.72	
	1/19/99	106.09	43.26	62.83	
	2/3/99	106.09	42.98	63.11	
	3/30/99	106.09	43.22	62.87	
	6/1/99	106.09	43.48	62.61	
	7/29/99	106.09	43.82	62.27	
	9/1/99	106.09	43.76	62.33	
	9/23/99	106.09	44.03	62.06	
MW-2	2/27/98	106.65	44.02	62.63	Truck parked on well.
	3/2/98	106.65	44.06	62.59	
	3/4/98	106.65	44.13	62.52	
	4/8/98	106.65	NR	--	
	5/20/98	106.65	43.51	63.14	
	10/8/98	106.65	42.84	63.81	
	11/5/98	106.65	42.64	64.01	
	12/21/98	106.65	42.69	63.96	
	1/19/99	106.65	42.66	63.99	
	2/3/99	106.65	42.55	64.10	
	3/30/99	106.65	42.63	64.02	
	6/1/99	106.65	42.91	63.74	
	7/29/99	106.65	43.13	63.52	
	9/1/99	106.65	43.14	63.51	
	9/23/99	106.65	43.35	63.30	
MW-3	2/27/98	105.87	44.55	61.32	
	3/2/98	105.87	44.56	61.31	
	3/4/98	105.87	44.40	61.47	
	4/8/98	105.87	44.39	61.48	
	5/20/98	105.87	43.80	62.07	
	10/8/98	105.87	43.26	62.61	
	11/5/98	105.87	43.60	62.27	
	12/21/98	105.87	43.33	62.54	
	1/19/99	105.87	43.18	62.69	

TABLE 1

Groundwater Elevations in Monitoring Wells

Quarterly Progress Report for July to September 1999

Jervis B. Webb Company, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-3 (cont.)	2/3/99	105.87	42.97	62.90	
	3/30/99	105.87	43.19	62.68	
	6/1/99	105.87	43.58	62.29	
	7/29/99	105.87	43.85	62.02	
	9/1/99	105.87	43.90	61.97	
	9/23/99	105.87	44.10	61.77	
MW-4	11/3/98	104.72	42.77	61.95	Well Developed
	11/5/98	104.72	42.64	62.08	
	12/21/98	104.72	42.93	61.79	
	1/19/99	104.72	42.80	61.92	
	2/3/99	104.72	42.63	62.09	
	3/30/99	104.72	42.89	61.83	
	6/1/99	104.72	43.28	61.44	
	7/29/99	104.72	43.63	61.09	
	9/1/99	104.72	43.70	61.02	
	9/23/99	104.72	43.96	60.76	
MW-5	11/3/98	106.13	43.32	62.81	Well Developed
	11/5/98	106.13	43.30	62.83	
	12/21/98	106.13	43.58	62.55	
	1/19/99	106.13	43.46	62.67	
	2/3/99	106.13	43.20	62.93	
	3/30/99	106.13	43.49	62.64	
	6/1/99	106.13	43.88	62.25	
	7/29/99	106.13	44.19	61.94	
	9/1/99	106.13	44.22	61.91	
	9/23/99	106.13	44.48	61.65	

NOTES:

Abbreviations:

ft n sl = feet above mean sea level

ft b gs = feet beneath ground surface

NR = Not Recorded

-- Not Applicable

- Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
- Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

TABLE 2

Analytical Results for Groundwater Samples

Quarterly Progress Report for July to September 1999

Jervis B. Webb Company, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration										TDS (µg/l)
			Benzene (µg/l)	Toluene (µg/l)	Xylenes (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	1,2-DCA (µg/l)	c-1,2-DCE (µg/l)	t-1,2-DCE (µg/l)	PCE (µg/l)	TCE (µg/l)	
MW-1	MW-1-0304	3/4/98	<100	<100	<100	<100	220	<100	130	<100	140	24,000	--
	MW-1-0304DUP	3/4/98	<100	<100	<100	<100	210	<100	150	<100	160	25,000	--
	MW-1-0520	5/20/98	<125	<125	<125	<125	160	<125	130	<125	<125	24,000	1,500
	MW-1	11/5/98	<125	<125	<125	<125	140	<125	160	<125	170	28,000	--
	MW-1	2/3/99	<125	<125	<125	<125	130	<125	160	<125	160	27,000	--
	MW-1	6/1/99	<100	<100	<100	<100	140	<100	190	<100	160	28,000	--
	MW-1	9/1/99	<100	<100	<100	140	220	<100	200	<100	190	32,000	--
MW-2	MW-2-0304	3/4/98	<10	<10	<10	13	34	<10	65	<10	<10	2,700	--
	MW-2-0520	5/20/98	<10	<10	<10	14	38	<10	68	<10	<10	3,000	2,500
	MW-2	11/5/98	<10	<10	<10	13	36	<10	68	<10	<10	3,200	--
	MW-2	2/3/99	<10	<10	<10	13	36	<10	70	<10	<10	3,200	--
	MW-2	6/1/99	<10	<10	<10	12	34	<10	68	<10	<10	2,800	--
	MW-2	9/1/99	<10	<10	<10	16	49	<10	72	<10	<10	3,100	--
MW-3	MW-3-0304	3/4/98	<10	13	<10	14	82	<10	200	<10	<10	2,800	--
	MW-3-0520	5/20/98	<10	<10	<10	13	58	<10	230	15	<10	2,800	1,100
	MW-3	11/5/98	<10	<10	<10	11	66	<10	240	18	<10	2,300	--
	MW-3	2/3/99	<10	<10	<10	11	64	<10	220	18	<10	2,000	--
	MW-3	6/1/99	<10	<10	<10	11	66	53	240	18	<10	1,900	--
	MW-3	9/1/99	<10	<10	<10	13	80	<10	270	20	<10	2,600	--
MW-4	MW-4	11/5/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	6.7	--
	MW-4	2/3/99	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	--
	MW-4	6/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	65	1.1	<0.5	<0.5	0.90	--
	MW-4	9/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--

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TABLE 2

Analytical Results for Groundwater Samples

Quarterly Progress Report for July to September 1999

Jervis B. Webb Company, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration										
			Benzene (µg/l)	Toluene (µg/l)	Xylenes (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	1,2-DCA (µg/l)	c-1,2-DCE (µg/l)	t-1,2-DCE (µg/l)	PCE (µg/l)	TCE (µg/l)	TDS (µg/l)
MW-5	MW-5	11/5/98	<25	<25	<25	<25	42	<25	380	30	<25	5,000	--
	MW-5-DUP	11/5/98	<25	<25	<25	<25	40	<25	360	29	<25	4,800	--
	MW-5	2/3/99	<25	<25	<25	<25	49	<25	420	35	<25	5,100	--
	MW-5-DUP	2/3/99	<25	<25	<25	<25	45	<25	370	31	<25	4,500	--
	MW-5	6/1/99	<25	<25	<25	<25	52	35	420	36	<25	5,500	--
	MW-5-DUP	6/1/99	<25	<25	<25	<25	56	39	430	35	<25	5,300	--
	MW-5	9/1/99	<25	<25	<25	<25	40	<25	420	45	<25	5,500	--
	MW-5-DUP	9/1/99	<25	<25	<25	<25	69	<25	440	45	<25	6,000	--

NOTES:

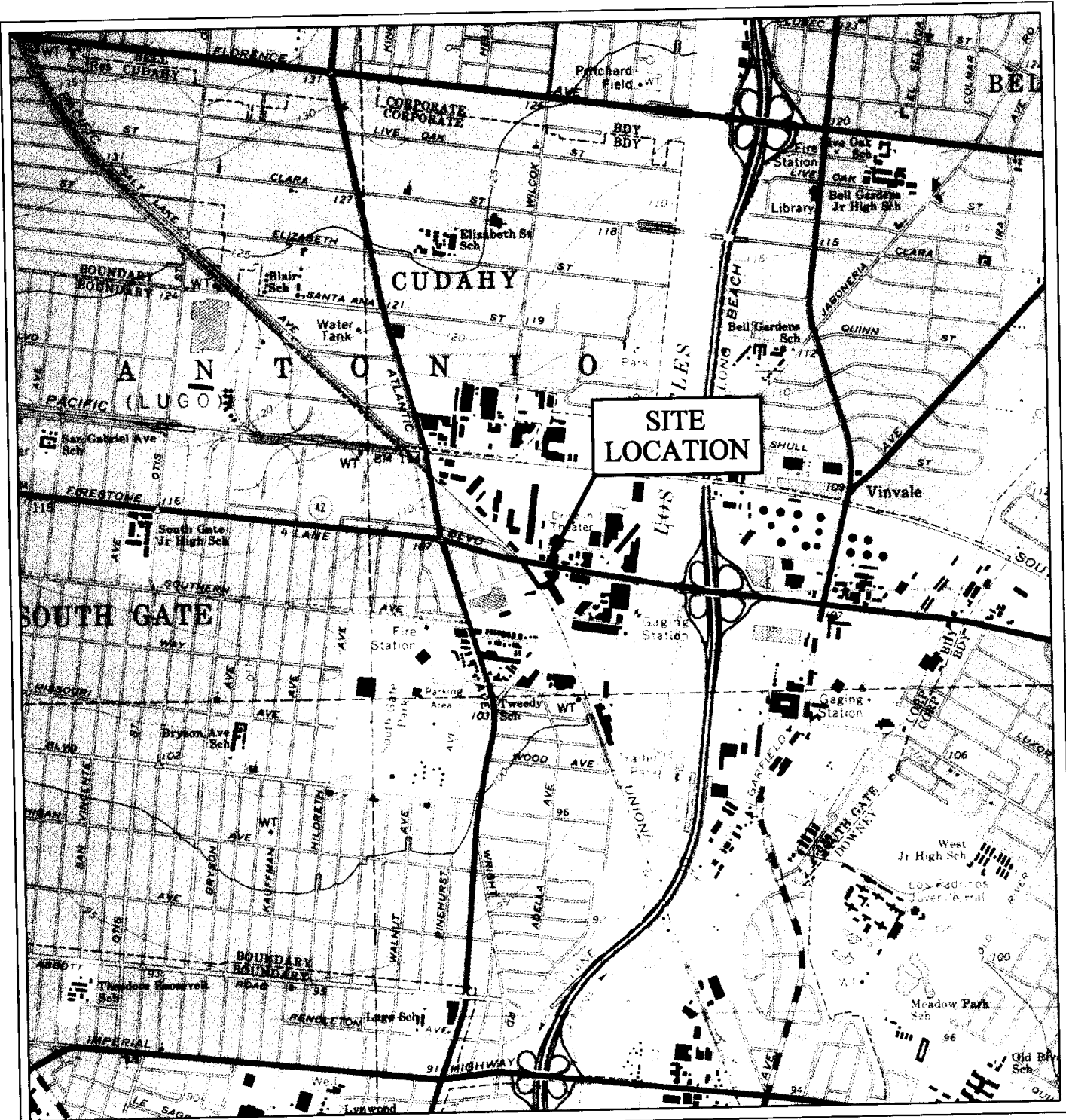
1,1-DCA = 1,1-dichloroethane
 1,1-DCE = 1,1-dichloroethene
 1,2-DCA = 1,2-dichloroethane
 c-1,2-DCE = cis-1,2-dichloroethene
 t-1,2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene
 TCE = trichloroethene
 TDS = total dissolved solids
 VOCs = volatile organic compounds
 Xylenes = total Xylene isomers

mg/l = milligrams per liter
 ug/l = micrograms per liter
 -- indicates not analyzed

- Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs and EPA Method 160.1 for TDS.
- < indicates that the analyte was not detected at a concentration above the indicated method detection limit.

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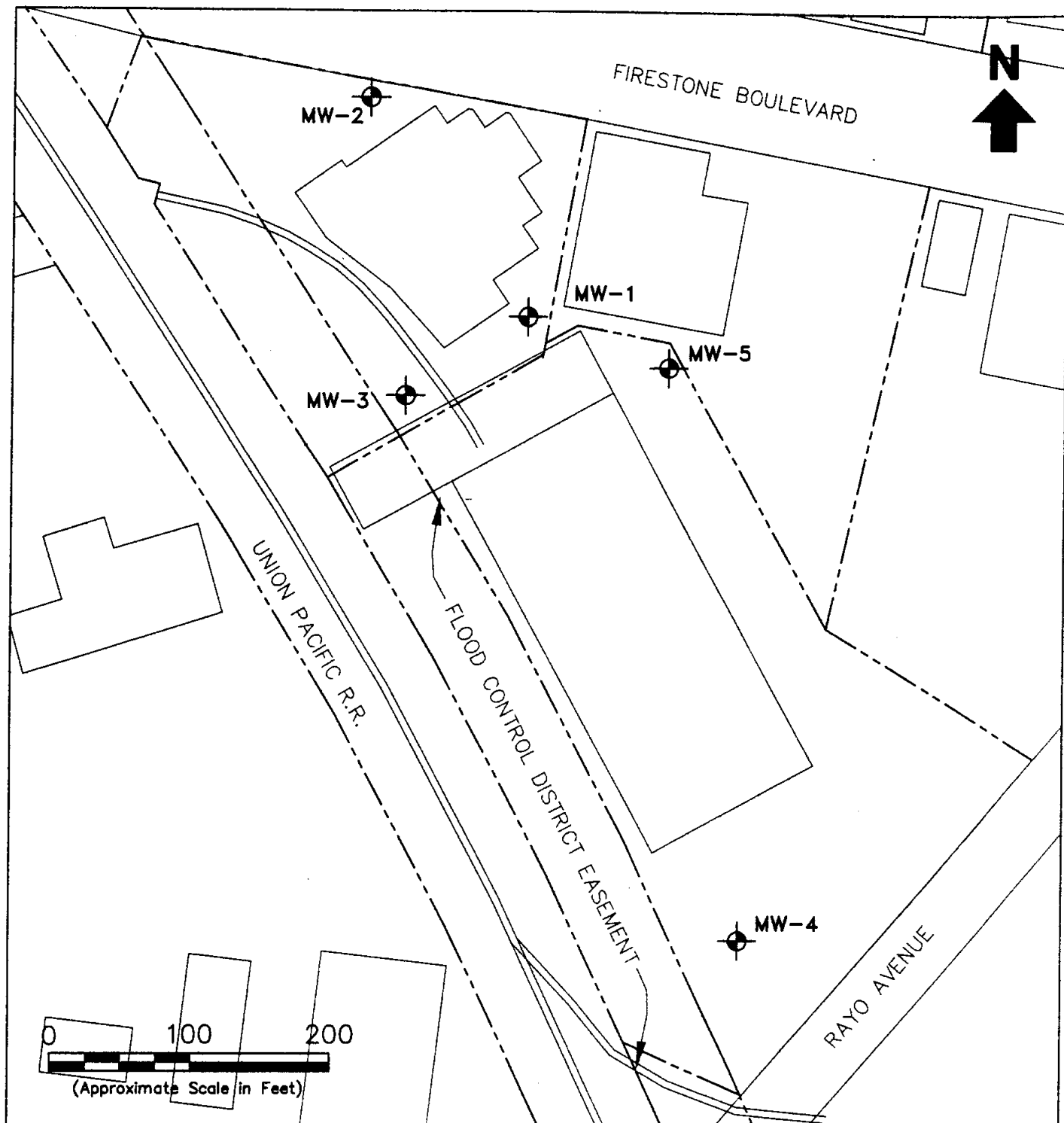
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 (Approximate Scale in Feet)

Source: U.S.G.S 7.5 Minute Series "South Gate"
 Quadrangle, 1964, photorevised 1981.



**Erler &
 Kalinowski, Inc.**

Site Location Map

Jervis B. Webb Company
 South Gate, California
 October 1999
 EKI 961025.04
 Figure 1



LEGEND

-  Groundwater Monitoring Well
-  Property Line/Boundary

Notes:

1. All locations are approximate.

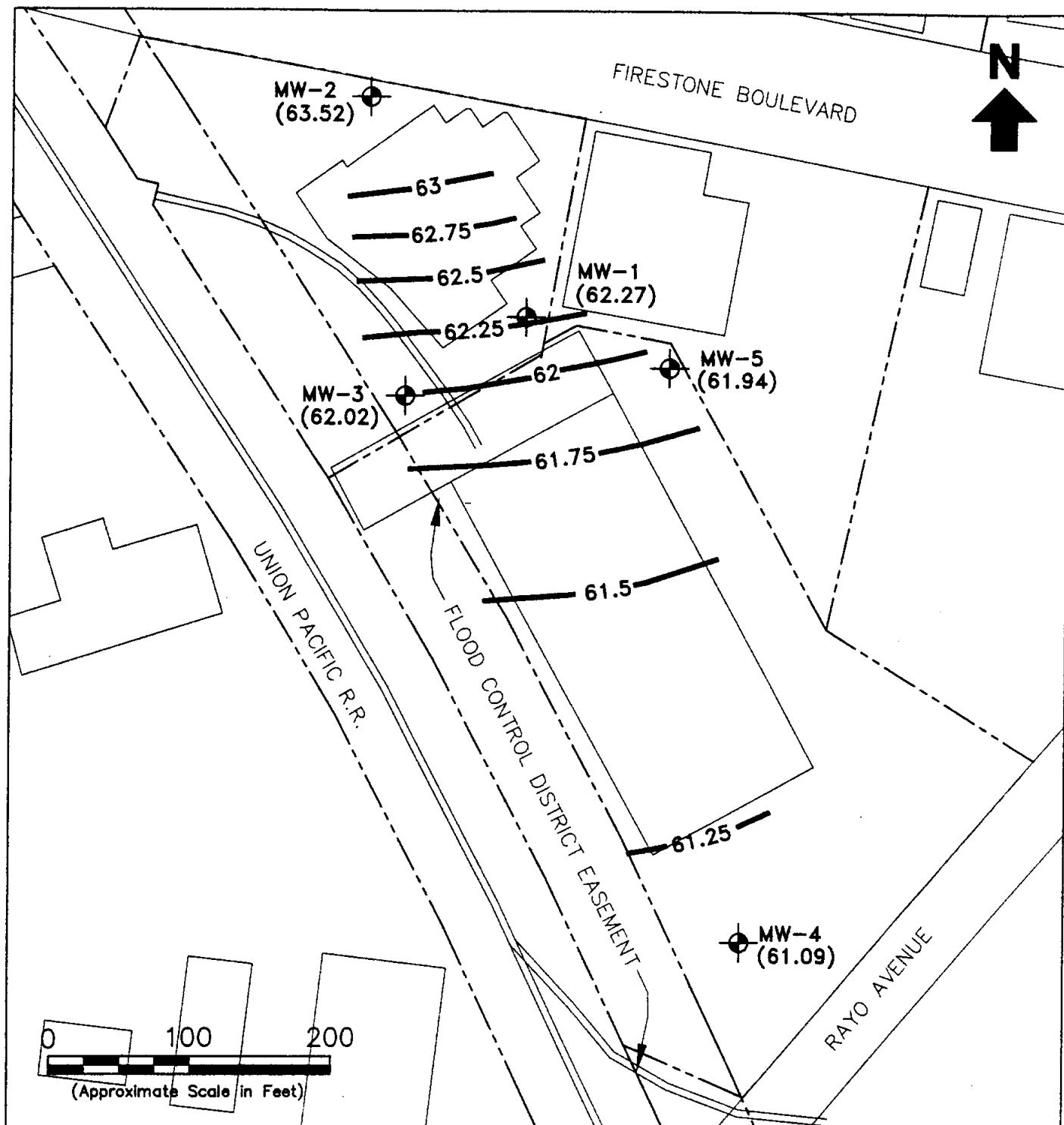
**Erler &
Kallnowski, Inc.**

Groundwater Monitoring
Well Locations




Jervis B. Webb Company
South Gate, California

October 1999
EKI 961025.04

Figure 2



LEGEND

-  Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
-  MW-3 (62.61) Groundwater Monitoring Well with Groundwater Elevation (msl)
-  Property Line/Boundary

Notes:

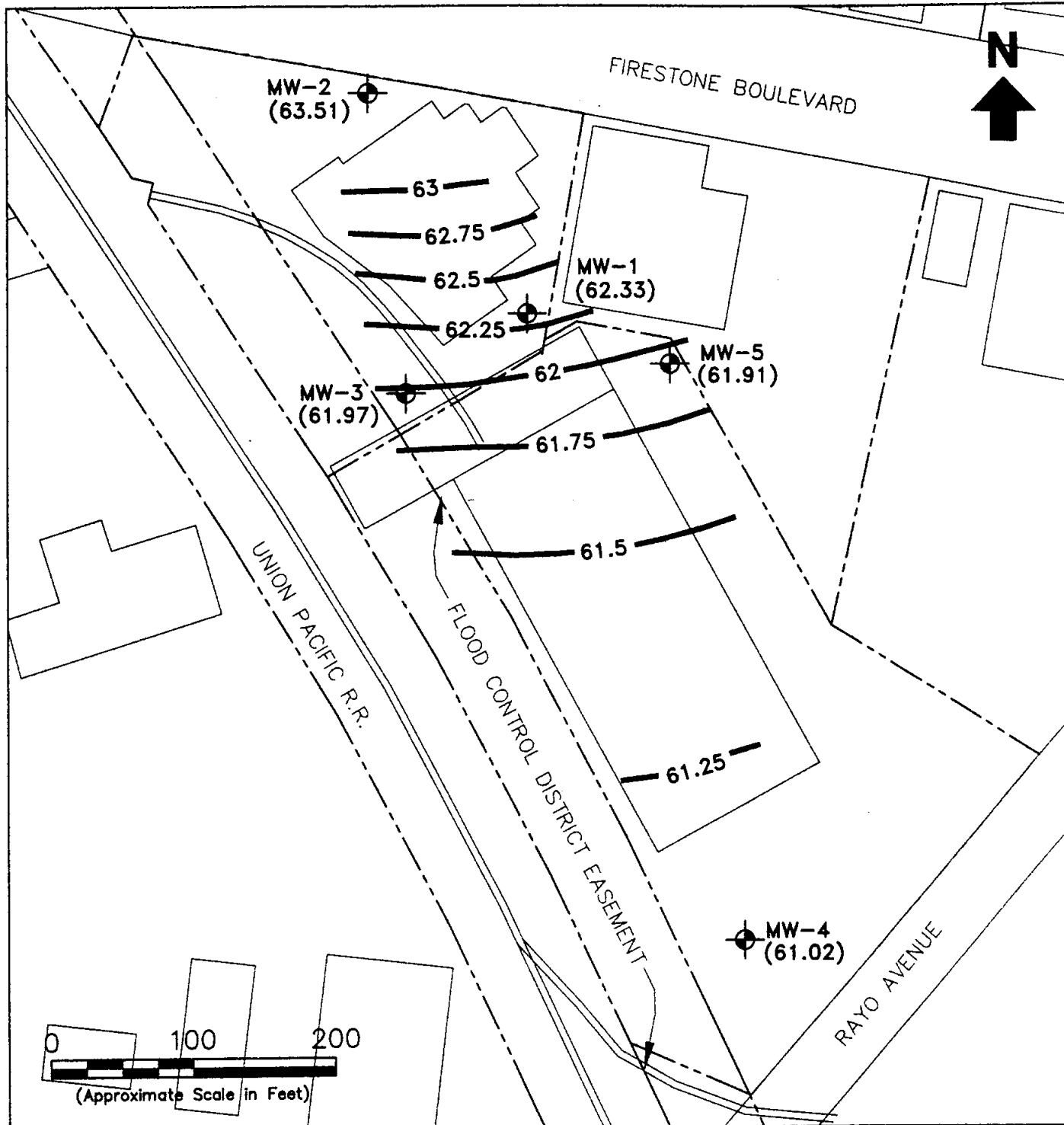
1. All locations are approximate.

Erler & Kallowski, Inc.

Elevation of the Groundwater Table on 29 July 1999

Jervis B. Webb Company
South Gate, California
October 1999
EKI 961025.04

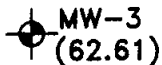
Figure 3



LEGEND



Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)



Groundwater Monitoring Well with Groundwater Elevation (msl)



Property Line/Boundary

Notes:

1. All locations are approximate.

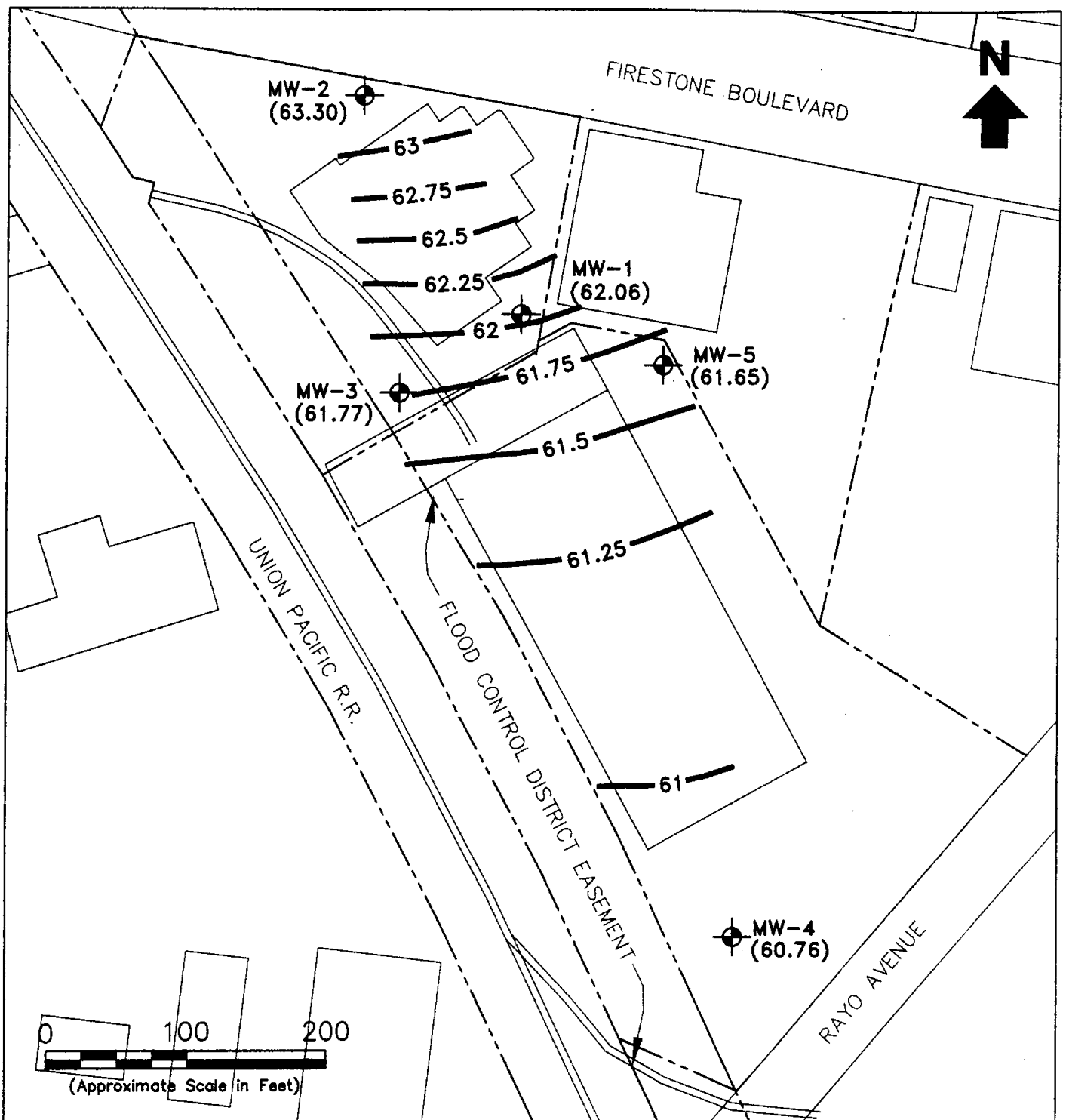
Erlor & Kallnowski, Inc.

Elevation of the Groundwater Table on 1 September 1999



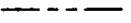
Jervis B. Webb Company
South Gate, California

October 1999
EKI 961025.04

Figure 4



LEGEND

-  Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
-  MW-3 (62.61) Groundwater Monitoring Well with Groundwater Elevation (msl)
-  Property Line/Boundary

Notes:

1. All locations are approximate.

Erler & Kallnowski, Inc.

Elevation of the Groundwater Table on 23 September 1999

Jervis B. Webb Company
South Gate, California
October 1999
EKI 961025.04

Figure 5

A

APPENDIX A

Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling

GROUNDWATER PURGE AND
WATER QUALITY MONITORING FORM

Erler &
Kalinowski, Inc.

PROJECT NAME: WEBB

DATE: 6/1/99

PROJECT NUMBER: 961025.02

WELL NUMBER: MW-1

PERSONNEL: BJA

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
70	43.76	= 26.24	* 0.64 =	16.8

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" SUBMERSIBLE

PURGE DEPTH: 52'

START TIME: 16:44

END TIME: 17:21

TOTAL GALLONS PURGED: 55

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity		
pH		
pH		
Turbidity		
Temperature		
Depth Probe		

SEE LOG FOR
WELL MW-4

Time	16:56	17:08	17:20					
Volume Purged (gallons)	20	40	50					
Temperature (degrees F or C)	72.3	70.0	69.3					
pH (units)	7.52	7.61	7.53					
Specific Conductivity (uS/cm)	1320	1870	2110					
Turbidity/Color (NTU)	2.55	7.17	0.37					
Odor	NONE	NONE	NONE					
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)								

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-1 17:25 2x40 mL VOAS w/HCl 8260

DECONNED H₂O LEVEL PROBE

001401

GROUNDWATER PURGE AND
WATER QUALITY MONITORING FORM

Erler &
Kalinowski, Inc.

PROJECT NAME: Webb DATE: 9/1/99
PROJECT NUMBER: 961025.02 WELL NUMBER: MW-2 PERSONNEL: BSA

WELL VOLUME CALCULATION:

Depth of Well (ft.) 70 - Depth to Water (ft.) 43.14 = Water Column (ft.) 26.86 * Multiplier (below) 0.64 = Casing Vol. (gallons) 17.2
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 3

PURGE METHOD: 2" SUBMERSIBLE

PURGE DEPTH: 52' → 58' (15 gal)

START TIME: 11:18

END TIME: 12:45

TOTAL GALLONS PURGED: 6560

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity		
pH		
pH		
Turbidity		
Temperature		
Depth Probe		

SEE MW-4

Time	11:26	11:40	11:54	12:45				
Volume Purged (gallons)	15	25	35	60				
Temperature (degrees F or C)	78.2	78.2	79.9	83.6				
pH (units)	7.06	7.06	7.08	7.16				
Specific Conductivity (uS/cm)	4450	3080	3700	2850				
Turbidity/Color (NTU)	22	28	25	4.15				
Odor	NONE	NONE	NONE	NONE				
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)								

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-2 12:50 2x40-ML VOAs w/HCl 8260

DECONMED H₂O LEVEL PROBE

GROUNDWATER PURGE AND
WATER QUALITY MONITORING FORM

Erler &
Kalinowski, Inc.

PROJECT NAME: WEBB DATE: 9/1/99
PROJECT NUMBER: 961025.02 WELL NUMBER: MW-3 PERSONNEL: BJA
WELL VOLUME CALCULATION: 13:53-OPEN
Depth of Well (ft.) 70 Depth to Water (ft.) 13:58-MEAS Water Column (ft.) 43.90 Multiplier (below) 0.64 Casing Vol. (gallons) 16.7
 $43.90 = 26.10 \cdot 0.64 = 16.7$
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0
PURGE METHOD: 2" SUBMERSIBLE
PURGE DEPTH: 52'
START TIME: 13:58 END TIME: 14:48
TOTAL GALLONS PURGED: 50

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity		
pH		
pH		
Turbidity		
Temperature		
Depth Probe		

SEE MW-4 LOG

Time	14:08	14:23	14:38	14:48				
Volume Purged (gallons)	10	25 25	40	50				
Temperature (degrees F or C)	79.8	75.6	75.4	75.6				
pH (units)	7.34	7.26	7.28	7.32				
Specific Conductivity (uS/cm)	1290	1400	1850	1990				
Turbidity/Color (NTU)	0.50	0.21	0.07	0.14				
Odor	NONE	NONE	NONE	NONE				
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)								

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested
SAMPLES: MW-3 14:50 2x40 ML WAS w/ HCl 8260

DISCONNECTED H₂O LEVEL PROBE

GROUNDWATER PURGE AND
WATER QUALITY MONITORING FORM

Erlor &
Kalinowski, Inc.

PROJECT NAME: WEBB

DATE: 9/1/99

PROJECT NUMBER: 961025.02

WELL NUMBER: MW-4

PERSONNEL: BJA

WELL VOLUME CALCULATION:

Depth of Well (ft.) Depth to Water (ft.) Water Column (ft.) Multiplier (below) Casing Vol (gallons)

70 - 43.70 = 26.3 * 0.64 = 16.8

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" SUBMERSIBLE

PURGE DEPTH: 52'

START TIME: 9:55

END TIME: 10:26

TOTAL GALLONS PURGED: 55

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity	<u>1510</u>	<u>1500</u>
pH	<u>7.01</u>	<u>7.00</u>
pH	<u>3.98</u>	<u>4.00</u>
Turbidity	<u>0.21</u>	<u>0.20</u>
Temperature	<u>67.1</u>	<u>-</u>
Depth Probe	<u>-</u>	<u>-</u>

Time	<u>10:10</u>	<u>10:15</u>	<u>10:23</u>					
Volume Purged (gallons)	<u>20</u>	<u>30</u>	<u>50</u>					
Temperature (degrees F or C)	<u>70.1</u>	<u>69.8</u>	<u>69.2</u>					
pH (units)	<u>6.70</u>	<u>6.68</u>	<u>6.73</u>					
Specific Conductivity (uS/cm)	<u>3660</u>	<u>4100</u>	<u>3870</u>					
Turbidity/Color (NTU)	<u>4.3</u>	<u>1.8</u>	<u>0.9</u>					
Odor	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>					
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)								

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-4 10:30 2x40mL VOAs w/HCl 8260

DISCONNECTED H₂O LEVEL PROBE (2 BUCKETS - 1 w/ LUNOX)

PROJECT NAME: WEBBDATE: 9/1/99PROJECT NUMBER: 961025.02WELL NUMBER: MW-5PERSONNEL: BJA

WELL VOLUME CALCULATION:

Depth of
Well (ft.)Depth to
Water (ft.)15:25 - OPEN15:30 - MEASWater
Column (ft.)Multiplier
(below)Casing Vol
(gallons)7044.22=25.78*0.64=16.5

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0PURGE METHOD: 2" SUBMERSIBLEPURGE DEPTH: 52'START TIME: 15:34END TIME: 16:10TOTAL GALLONS PURGED: 55

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
------------	------------------	---------------------

Conductivity

pH

pH

Turbidity

Temperature

Depth Probe

SEE LOG FOR
WELL MW-4

Time	<u>15:43</u>	<u>15:54</u>	<u>16:02</u>					
Volume Purged (gallons)	<u>20</u>	<u>40</u>	<u>50</u>					
Temperature (degrees <u>F</u> or C)	<u>73.8</u>	<u>72.2</u>	<u>71.4</u>					
pH (units)	<u>7.27</u>	<u>7.15</u>	<u>7.09</u>					
Specific Conductivity (uS/cm)	<u>3490</u>	<u>3550</u>	<u>3580</u>					
Turbidity/Color (NTU)	<u>1.01</u>	<u>0.32</u>	<u>0.18</u>					
Odor	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>					
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)								

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES:	<u>MW-5</u>	<u>16:10</u>	<u>2x40-ML VOAS w/HCl</u>	<u>8260</u>
	<u>MW-5 DUP</u>	<u>16:15</u>	<u>2x40-ML VOAS w/HCl</u>	<u>8260</u>

DECONNECTED H₂O LEVEL PROBE

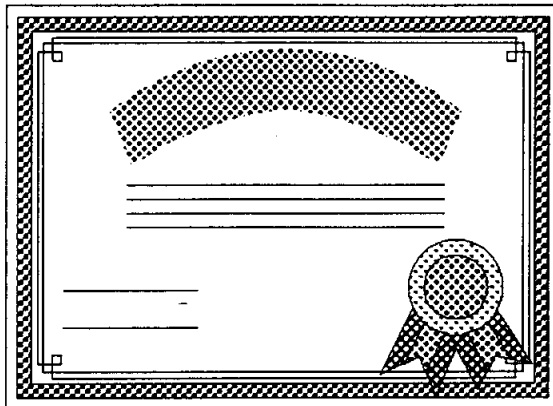
B

APPENDIX B

Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling

**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970



ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.

RECEIVED

SEP 14 1999

GREEN & KALINOWSKI, INC.
ENVIRONMENTAL OFFICE

RECEIVED

AUG 14 1999

GREEN & KALINOWSKI, INC.
ENVIRONMENTAL OFFICE

**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

ANALYTICAL TEST RESULTS 8260**Reporting Unit: ug/l**

DATE ANALYZED		09/09/99	09/09/99	09/09/99	09/09/99
DILUTION FACTOR		1	1	20	20
LAB SAMPLE I.D.			99090029	99090030	99090031
CLIENT SAMPLE I.D.			MW-4	MW-2	MW-3
COMPOUND	MDL	MB			
Acetone	2.0	<2.0	<2.0	<40	<40
Benzene	0.5	<0.5	<0.5	<10	<10
Bromodichloromethane	0.5	<0.5	<0.5	<10	<10
Bromoform	0.5	<0.5	<0.5	<10	<10
Bromomethane	1.0	<1.0	<1.0	<20	<20
2-Butanone	1.0	<1.0	<1.0	<20	<20
Carbon Disulfide	0.5	<0.5	<0.5	<10	<10
Carbon Tetrachloride	0.5	<0.5	<0.5	<10	<10
Chlorobenzene	0.5	<0.5	<0.5	<10	<10
Chlorodibromomethane	0.5	<0.5	<0.5	<10	<10
Chloroethane	0.5	<0.5	<0.5	<10	<10
2-Chloroethyl vinyl ether	1.0	<1.0	<1.0	<20	<20
Chloroform	0.5	<0.5	<0.5	<10	<10
Chloromethane	0.5	<0.5	<0.5	<10	<10
1,1-Dichloroethane	0.5	<0.5	<0.5	16	13
1,2-Dichloroethane	0.5	<0.5	<0.5	<10	<10
1,1-Dichloroethene	0.5	<0.5	<0.5	49	80
cis 1,2-Dichloroethene	0.5	<0.5	<0.5	72	270
Trans 1,2-Dichloroethene	0.5	<0.5	<0.5	<10	20
1,2-Dichloropropane	0.5	<0.5	<0.5	<10	<10
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<10	<10
trans-1,3-Dichloropropene	0.5	<0.5	<0.5	<10	<10
Ethylbenzene	0.5	<0.5	<0.5	<10	<10
2-Hexanone	1.0	<1.0	<1.0	<20	<20
Methylene chloride	2.5	<2.5	<2.5	<50	<50
4-Methyl-2-pentanone	1.0	<1.0	<1.0	<20	<20
Styrene	0.5	<0.5	<0.5	<10	<10
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5	<10	<10
Tetrachloroethene	0.5	<0.5	<0.5	<10	<10
Toluene	0.5	<0.5	<0.5	<10	<10
1,1,1-Trichloroethane	0.5	<0.5	<0.5	<10	<10
1,1,2-Trichloroethane	0.5	<0.5	<0.5	<10	<10
Trichloroethene	0.5	<0.5	<0.5	3,100	2,600
Trichlorofluoromethane	0.5	<0.5	<0.5	<10	<10
Vinyl acetate	1.0	<1.0	<1.0	<20	<20
Vinyl Chloride	0.5	<0.5	<0.5	<10	<10
Total Xylenes	0.5	<0.5	<0.5	<10	<10

SURROGATE	SPK	ACP%	MB			
RECOVERY	CONC		%RC			
Dibromofluoromethane	50	86-118	105	107	101	105
Toluene-d8	50	88-110	106	108	106	105
4-Bromofluorobenzene	50	86-115	114	115	112	115

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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

ANALYTICAL TEST RESULTS 8260**Reporting Unit: ug/l**

DATE ANALYZED		09/09/99	09/09/99	09/09/99	09/09/99
DILUTION FACTOR		1	50	50	200
LAB SAMPLE I.D.			99090032	99090033	99090034
CLIENT SAMPLE I.D.			MW-5	MW-5-DUP	MW-1
COMPOUND	MDL	MB			
Acetone	2.0	<2.0	<100	<100	<400
Benzene	0.5	<0.5	<25	<25	<100
Bromodichloromethane	0.5	<0.5	<25	<25	<100
Bromoform	0.5	<0.5	<25	<25	<100
Bromomethane	1.0	<1.0	<50	<50	<200
2-Butanone	1.0	<1.0	<50	<50	<200
Carbon Disulfide	0.5	<0.5	<25	<25	<100
Carbon Tetrachloride	0.5	<0.5	<25	<25	<100
Chlorobenzene	0.5	<0.5	<25	<25	<100
Chlorodibromomethane	0.5	<0.5	<25	<25	<100
Chloroethane	0.5	<0.5	<25	<25	<100
2-Chloroethyl vinyl ether	1.0	<1.0	<50	<50	<100
Chloroform	0.5	<0.5	<25	<25	<100
Chloromethane	0.5	<0.5	<25	<25	<100
1,1-Dichloroethane	0.5	<0.5	<25	<25	140
1,2-Dichloroethane	0.5	<0.5	<25	<25	<100
1,1-Dichloroethene	0.5	<0.5	40	69	220
cis 1,2-Dichloroethene	0.5	<0.5	420	440	200
Trans 1,2-Dichloroethene	0.5	<0.5	45	45	<100
1,2-Dichloropropane	0.5	<0.5	<25	<25	<100
cis-1,3-Dichloropropene	0.5	<0.5	<25	<25	<100
trans-1,3-Dichloropropene	0.5	<0.5	<25	<25	<100
Ethylbenzene	0.5	<0.5	<25	<25	<100
2-Hexanone	1.0	<1.0	<50	<50	<200
Methylene chloride	2.5	<2.5	<125	<125	<500
4-Methyl-2-pentanone	1.0	<1.0	<50	<50	<200
Styrene	0.5	<0.5	<25	<25	<100
1,1,2,2-Tetrachloroethane	0.5	<0.5	<25	<25	<100
Tetrachloroethene	0.5	<0.5	<25	<25	190
Toluene	0.5	<0.5	<25	<25	<100
1,1,1-Trichloroethane	0.5	<0.5	<25	<25	<100
1,1,2-Trichloroethane	0.5	<0.5	<25	<25	<100
Trichloroethene	0.5	<0.5	5,500	6,000	32,000
Trichlorofluoromethane	0.5	<0.5	<25	<25	<100
Vinyl acetate	1.0	<1.0	<50	<50	<200
Vinyl Chloride	0.5	<0.5	<25	<25	<100
Total Xylenes	0.5	<0.5	<25	<25	<100

SURROGATE	SPK	ACP%	MB			
RECOVERY	CONC		%RC			
Dibromofluoromethane	50	86-118	105	105	101	104
Toluene-d8	50	88-110	106	107	109	106
4-Bromofluorobenzene	50	86-115	114	114	115	115

**ORANGE COAST ANALYTICAL, INC.**

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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

8260 QA / QC REPORT

Reporting Unit : $\mu\text{g/l}$

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date Performed : 09/09/99

LAB Sample I. D. : 99090029

ANALYTE	R1	SP CONC	MS	%MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD
1,1-Dichloroethene	0.0	20	19	18	95	90	5	61-145	14
Benzene	0.0	20	20	19	100	95	5	76-127	11
Trichloroethene	0.0	20	19	19	95	95	0	71-120	14
Toluene	0.0	20	18	18	90	90	0	76-125	13
Chlorobenzene	0.0	20	18	18	90	90	0	75-130	13

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration ($\leq 5 \times \text{PQL}$) ; PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS: $\{(\text{MS}-\text{R1})/\text{SP}\} \times 100$.

%MSD = Percent Recovery of MSD: $\{(\text{MSD}-\text{R1})/\text{SP}\} \times 100$.

RPD = Relative Percent Difference: $\{(\text{MS} - \text{MSD})/(\text{MS} + \text{MSD})\} \times 100 \times 2$

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

2. Laboratory Quality Control check sample

Date Performed : 09/09/99

LAB Sample I. D. : OCA 7184

ANALYTE	SPK CONC	RESULTS	%RECOVERY	ACP %
1,1-Dichloroethane	50	59	118	80 -120
Carbon tetrachloride	50	60	120	80 -120
Ethylbenzene	50	55	110	80 -120
Tetrachloroethene	50	51	102	80 -120

ANALYST: Mehran Hasemi

DATE: 09/09/99

001411



ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification

(ELAP) No.: 1416

Expiration Date: 2001

Laboratory Director's Name (Print) : Mark Noorani

Client: Erler & Kalinowski, Inc.

Project No.: 961025.02

Project Name: Webb

Laboratory Reference: EKI 11130

Analytical Method: EPA 8260

Date Sampled: 09/01/99

Date Received: 09/03/99

Date Reported: 09/10/99

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: 

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kallnowski, Inc.

Analytical Laboratory: ORANGE COAST ANALYTICALProject Number: 961025.02Date Sampled: 9/1/99Project Name: WEBBSampled By: BSA

Source of Sample:

Report Results To: BRIAN AUCHARD

Location:

Phone Number: (310) 314-0855

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
	MW-4	W	2 x 40 mL VOA	10:30	8260	
	MW-2	W	"	12:50	"	
	MW-3	W	"	14:50	"	
	MW-5	W	"	16:10	"	
	MW-5 DUP	W	"	16:15	"	
	MW-1	W	"	17:25	"	

Special Instructions:

STANDARD 2-WEEK TURN-AROUND

Relinquished By:

Name / Signature / Affiliation

Date

Time

Received By:

Name / Signature / Affiliation

BRIAN AUCHARD / *[Signature]* / BK1

9/1/99

19:30

9-3-99

9:45

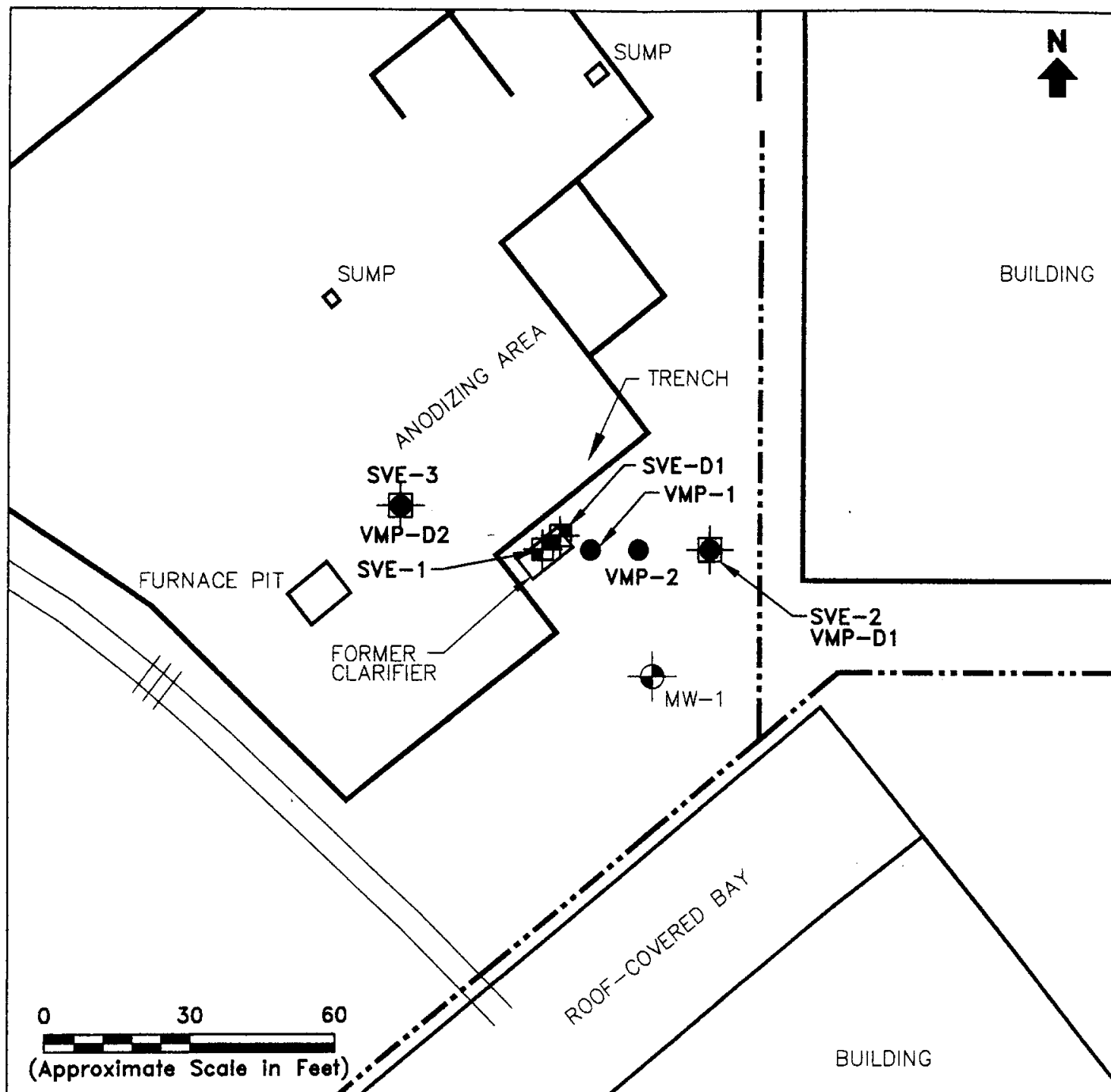
m. Van Kester / *[Signature]* / OCA Lab

001413

C

APPENDIX C

Vapor Well Boring Logs and Well Construction Logs



LEGEND

- LOCATION OF NESTED SOIL VAPOR EXTRACTION AND VACUUM MONITORING WELL
- LOCATION OF SOIL VAPOR EXTRACTION WELL
- LOCATION OF VACCUM MONITORING POINT
- LOCATION OF GROUNDWATER MONITORING WELL
- PROPERTY LINE/BOUNDARY
- BUILDING
- RAILROAD SPUR

Notes:

1. All locations are approximate.

**Erler &
Kallnowski, Inc.**

Vapor Well Locations






Jervis B. Webb Company
South Gate, CA

October 1999
EKI 961025.04

Figure C-1

KEY TO BORING & WELL CONSTRUCTION LOGS

LEGEND

	Soil Sample Location
	Sample Retained for Chemical Analysis by Laboratory
	Sample Retained for Physical Parameter Analysis by Laboratory
NR	No Sample Recovery
	First Encountered Groundwater Level
	Potentiometric Groundwater Level
10YR 4/3	Soil or Rock Color According to Munsell Color Chart

Organic Vapor Meter (OVM) Readings

Locations Monitored

BZ – BREATHING ZONE
A – TOP OF AUGER
C – DRILL CUTTINGS
S – SAMPLE

Reported in parts per million (ppmv)

Penetration Resistance







Sample drive hammer weight – 140 pounds;
fall = 30 inches. Blows required to drive sampler 0.5 feet are indicated on the logs.

All Contacts are Approximate

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)¹

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS	GW	Well-graded gravel, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravel, gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES	GM	Silty gravel, gravel-sand-silt mixtures
			GC	Clayey gravel, gravel-sand-clay mixtures
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS	SW	Well-graded sand, gravelly sand, little or no fines
			SP	Poorly graded sand, gravelly sand, little or no fines
		SANDS WITH FINES	SM	Silty sand, sand-silt mixtures
			SC	Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS & CLAYS	LOW LIQUID LIMIT ²	ML	Inorganic silt and very fine sand, rock flour, silty or clayey fine sand, or clayey silt, with slight plasticity
			CL	Inorganic clay of low to medium plasticity, gravelly clay, sandy clay, silty clay, lean clay
			OL	Organic silt and organic silty clay of low plasticity
		HIGH LIQUID LIMIT ²	MH	Inorganic silt, micaceous or diatomaceous fine sandy or silty soil, elastic silt
			CH	Inorganic clay of high plasticity, fat clay
			OH	Organic clays of medium to high plasticity, organic silt
			HIGHLY ORGANIC SOILS	

WELL CONSTRUCTION

Information concerning well construction is present in the header of the boring logs and graphically on the log form. See the boring log header and drillers notes for additional details.			Cement, portland or neat cement
			Bentonite grout or cement-bentonite grout with up to five percent bentonite
 Blank well casing, materials specified in boring log header			Bentonite pellets, hydrated in place
 Perforated well casing, materials and slot size specified in boring log header			Sand filter pack, clean, sorted sand

NOTES:

- For a complete description of the Unified Soil Classification System, see Geotechnical Branch Training Manual Nos. 4, 5, and 6 published in 1986 by the Bureau of Reclamation, Geotechnical Branch, Division of Research and Laboratory Services, Engineering and Research Center, Denver, Colorado.
- Liquid limit is defined as that moisture content, expressed as a percentage of the dry mass of soil, at which the soil first shows a small but definite shear strength as the moisture content is reduced.

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME SVE-1		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (Inches)	FROM (feet) TO	DATE STARTED 6/23/99	DATE COMPLETED 6/23/99	
BLANK CASING Sch. 40 PVC	DIAMETER (Inches) 2.00	FROM (feet) 0 TO 19	BOREHOLE SIZE (Inches) 6.25	TOTAL DEPTH (feet) 26	
PERFORATED CASING Sch. 40 PVC (0.020 inch)	DIAMETER (Inches) 2.00	FROM (feet) 19 TO 25	DATUM None		
GROUT None		FROM (feet) TO	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) 2 TO 18	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) 18 TO 26	CHECKED BY Earl D. James, R.G.		

REMARKS None

SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)				
						0	Log from surface to 15 feet from auger cuttings.			
						1				
						2	SAND, imported fill soil used to backfill excavation for former clarifier, light yellowish brown (10YR, 6/4), sand as fine to coarse grained, loose, slightly moist.	SW		
						3				
						4				
						5				
						6				
						7				
						8				
						9				
						10				

Boring & Well Construction Log

Erlor & Kallnowski, Inc.

PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-1	
SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)					
13:55						11	Cuttings in auger flights are native soil when bit reaches approximately 13 feet.	SW			
						12					
						13					
						14					
						15					
				0.5	3		15	<u>SANDY SILT</u> , light brownish gray (2.5Y 6/2), (15,50,35,0), sand as fine grained, micaceous, soft, moist. Color changes to grayish brown (2.5Y 4/2) at 16.5 feet.	ML		
				0.5	4		16				
				0.5	5		17				
							18				
							19				
14:12						20	<u>SANDY SILT</u> , as above.				
				0.2	5						21
				0.5	8						22
				0.5	9						23
				0.5	5						24
				0.5	8		22	<u>SILTY SAND</u> , grayish brown (2.5Y 5/2), (10,30,60,0), sand as fine grained, micaceous, loose, moist.	SM		
				0.5	11		23				
				0.5	3		24				
				0.5	5		25				
				0.5	9		26				
				0	4		27	<u>SANDY SILT</u> , grayish brown (2.5Y 5/2) with brown flecks (10YR 4/3), sand as fine grained, micaceous, non-plastic, firm, moist to wet.	ML		
				0.5	7		28				
			0.5	11		29					
						30	End boring 26 feet.				
						31					
						32					
						33					

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME VMP-1		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (Inches)	FROM (feet) TO	DATE STARTED 6/24/99	DATE COMPLETED 6/24/99	
BLANK CASING Sch. 40 PVC	DIAMETER (Inches) 2.00	FROM (feet) 0 TO 19	BOREHOLE SIZE (Inches) 6.25	TOTAL DEPTH (feet) 26	
PERFORATED CASING Sch. 40 PVC (0.020 Inch)	DIAMETER (Inches) 2.00	FROM (feet) 19 TO 25	DATUM None		
GROUT None		FROM (feet) TO	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) 2 TO 18	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) 18 TO 26	CHECKED BY Earl D. James, R.G.		
REMARKS None					

SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)				
9:25			0.3	1		0	SAND, imported fill soil used to backfill excavation for former clarifier, light yellowish brown (10YR, 6/4), sand as fine to coarse grained, loose, slightly moist. SILTY SAND, dark grayish brown (2.5Y 4/2), (10,35,55,0), sand as fine grained, micaceous, soft to firm, moist.	SW		
			0.5	2		1				
			0.5	3		2				
9:30			0.5	2		3	SANDY SILT, dark grayish brown (2.5Y 4/2), (20,50,30,0), sand as fine grained, micaceous, slight plasticity, soft to firm, moist. Grading less fines from 10.5 to 11.5 feet.	SM		
			0.5	10		4				
						5				

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Boring & Well Construction Log

Erler & Kallnowski, Inc.

PROJECT NAME		PROJECT NUMBER		BOREHOLE/ WELL NAME					
Jervis B. Webb Company		961025.04		VMP-1					
SAMPLES						MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)				
9:40			0.5	12		11	SANDY SILT, as above.	ML	
						12			
						13			
						14			
				0.5	3	15			
			0.5	5	16				
			0.5	5	17				
					18				
					19				
			0.2	5	20	SANDY SILT, as above. Clayey at 20.5 feet. Grading less fines from 20.5 to 21.5 feet.			
			0.5	8	21				
			0.5	9	22				
			0.5	5	23				
			0.5	8	24				
9:45			0.5	11		25			
			0.5	3		26			
			0.5	5		27			
9:50			0.5	9		28	SANDY SILT, grayish brown (2.5Y 5/2) and minor brown flecks (10YR 4/3), (15,50,35,0), sand as fine grained, micaceous, firm, moist to wet.		
			0	4		29			
			0.5	7		30			
			0.5	11		31	End boring 26 feet.		
					32				
					33				

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME VMP-2		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (inches)	FROM (feet) TO	DATE STARTED 6/24/99	DATE COMPLETED 6/24/99	
BLANK CASING Sch. 40 PVC	DIAMETER (inches) 2.00	FROM (feet) 0 TO 19	BOREHOLE SIZE (inches) 6.25	TOTAL DEPTH (feet) 26	
PERFORATED CASING Sch. 40 PVC (0.020 inch)	DIAMETER (inches) 2.00	FROM (feet) 19 TO 25	DATUM None		
GROUT None		FROM (feet) TO	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) 2 TO 18	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) 18 TO 26	CHECKED BY Earl D. James, R.G.		
REMARKS None					

SAMPLES						MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVN (ppm)					
						0 ASPHALT, four inches thick.				
						1 No log to 15 feet. Soil boring located 3 feet north of boring B-2. See log for boring B-2 for details.				
						2				
						3				
						4				
						5				
						6				
						7				
						8				
						9				
						10				

Boring & Well Construction Log

Erler & Kallnowski, Inc.

PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		VMP-2	
SAMPLES						MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION		
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)					DEPTH (feet)	
11:00			0.5	2		11	SANDY SILT, dark grayish brown (2.5Y 4/2), (15,50, 35,0), sand as fine grained, micaceous, firm, moist. Clayey at 16 feet.	ML			
			0.5	3		12					
			0.5	6		13					
11:05			0.5	3		14	SANDY SILT, grayish brown (2.5Y 5/2), (15,60,25,0), sand as fine grained, micaceous, firm, moist. Grading less fines from 21 to 21.5 feet.				
			0.5	4		15					
			0.5	7		16					
11:10			0.5	4		17	SANDY SILT, dark grayish brown (2.5Y 4/2), (15,50,35,0), sand as fine grained, micaceous, firm, saturated. CLAYEY SILT, gray (2.5Y 6/1) with brown flecks (10YR 4/3), (30,60,20,0), sand as fine grained, micaceous, slightly plastic, firm, moist. Contact at 26 feet.				
			0.5	5		18					
			0.5	5		19					
						20	End boring 26 feet.				

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME SVE-D1		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (inches)	FROM (feet) TO	DATE STARTED 6/24/99	DATE COMPLETED 6/24/99	
BLANK CASING Sch. 40 PVC	DIAMETER (inches) 4.00	FROM (feet) var. TO var.	BOREHOLE SIZE (inches) 10.25	TOTAL DEPTH (feet) 45	
PERFORATED CASING Sch. 40 PVC (0.020 Inch)	DIAMETER (inches) 4.00	FROM (feet) 30 TO 40	DATUM None		
GROUT Wyo-Ben Bentonite Grout		FROM (feet) 2 TO 24	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) 24 TO 29	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) 29 TO 45	CHECKED BY Earl D. James, R.G.		

REMARKS Blank casing installed from surface to 30 feet below ground surface and from 40 to 43 feet.

SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVN (ppm)	DEPTH (feet)					
						0	ASPHALT, four inches thick.				
						1	No log for boring. Soil boring located 5 feet northwesterly of boring/well SVE-1 and 5 feet north of boring B-18. See logs for SVE-1 and B-18 for details.				
						2					
						3					
						4					
						5					
						6					
						7					
						8					
						9					
						10					

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Boring & Well Construction Log

Erler & Kallnowski, Inc.

PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-D1	
SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)					
						11					
						12					
						13					
						14					
						15					
						16					
						17					
						18					
						19					
						20					
						21					
						22					
						23					
						24					
						25					
						26					
						27					
						28					

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PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-D1	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)		USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
						29					
						30					
						31					
						32					
						33					
						34					
						35					
						36					
						37					
						38					
						39					
						40					
						41					
						42					
						43					
						44					
						45	End boring 45 feet.				

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME SVE-2/VMP-D1		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (Inches)	FROM (feet) TO	DATE STARTED 6/24/99	DATE COMPLETED 6/24/99	
BLANK CASING (2) Sch. 40 PVC	DIAMETER (Inches) 2.00	FROM (feet) var. TO var.	BOREHOLE SIZE (Inches) 10.25	TOTAL DEPTH (feet) 45	
PERFORATED CASING (2) Sch. 40 PVC (0.020 inch)	DIAMETER (Inches) 2.00	FROM (feet) var. TO var.	DATUM None		
GROUT Wyo-Ben Bentonite Grout		FROM (feet) 2 TO 13	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) var. TO var.	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) var. TO var.	CHECKED BY Earl D. James, R.G.		
REMARKS Nested well construction consists of two, 2-inch wells. Well materials and annular materials installed at various depth intervals. See the graphic well construction diagram for specific depths.					

SAMPLES							USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	QVM (ppm)	DEPTH (feet)			
						0			
						1			
						2			
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						10			

Boring & Well Construction Log

**Erler &
Kallnowski, Inc.**

PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-2/VMP-D1	
SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)					
13:30			0.5	2		11	SANDY SILT, grayish brown (2.5Y 5/2), (15,50,35,0), sand as fine grained, micaceous, soft to firm, moist. Clayey at 15.5 to 16 feet. Color change to dark grayish brown (2.5Y 4/2) at 16 feet. Grading less fines at 16.5 feet.	SM			
						12					
			0.5	3		13					
			0.5	4		14					
13:35			0.5	2		15	SANDY SILT, as above. Grading increased fines. Clayey at 20.5 to 21 feet. Color change to dark gray (2.5Y 4/1) at 21 feet.	ML			
						16					
			0.5	3		17					
			0.5	5		18					
13:40			0.5	4		19	SANDY SILT, as above. Grades to clayey silt and color change to gray (2.5Y 6/1) with brown flecks (10YR 4/3) at 26 feet.	ML			
						20					
			0.5	5		21					
			0.5	6		22					
						23					
						24					
						25					
						26					
						27					
						28					

PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-2/VMP-D1	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)		USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
13:45			0.5	3		29	SILTY CLAY, dark gray (2.5Y 4/3), (50,35,15,0), sand as fine grained, micaceous, medium plasticity, firm, moist.	ML			
			0.5	3		30		CL			
			0.5	7		31					
13:50			0.5	4		32	SANDY SILT, grayish brown (2.5Y 4/2), (15,50,35,0), sand as fine grained, micaceous, firm, moist.	ML			
			0.5	6		33					
			0.5	11		34					
14:00			0.5	5		35	SAND, light gray (2.5Y 7/2), (5,10,85,0), sand as fine grained, micaceous, poorly graded, dense, moist.	SP			
			0.5	10		36					
			0.3	12		37					
						38	SANDY SILT, dark grayish brown (2.5Y 4/2), (15,50,35,0), sand as fine grained, micaceous, firm, moist to wet.	ML			
					39						
					40						
						41					
						42					
						43					
						44					
						45	End boring 45 feet.				

Boring & Well Construction Log

Erler & Kallnowski, Inc.

BOREHOLE LOCATION 5030 Firestone Blvd., South Gate, CA			BOREHOLE/ WELL NAME SVE-3/VMP-D2		
DRILLING COMPANY West Hazmat Drilling Corporation			PROJECT NAME Jervis B. Webb Company		
DRILLING METHOD CME 75 Hollow Stem Auger			PROJECT NUMBER 961025.04		
CONDUCTOR CASING None	DIAMETER (inches)	FROM (feet) TO	DATE STARTED 6/23/99	DATE COMPLETED 6/23/99	
BLANK CASING (2) Sch. 40 PVC	DIAMETER (inches) 2.00	FROM (feet) var. TO var.	BOREHOLE SIZE (inches) 6.25/10.25	TOTAL DEPTH (feet) 45	
PERFORATED CASING (2) Sch. 40 PVC (0.020 inch)	DIAMETER (inches) 2.00	FROM (feet) var. TO var.	DATUM None		
GROUT Wyo-Ben Bentonite Grout		FROM (feet) 2 TO 14	TOP OF CASING	GROUND SURFACE	
SEAL Wyo-Ben Bentonite Chips (hydrated)		FROM (feet) var. TO var.	LOGGED BY Rob C. Hesse		
FILTER PACK #3 (8 x 20) Lone Star Sand		FROM (feet) var. TO var.	CHECKED BY Earl D. James, R.G.		
REMARKS Nested well construction consists of two, 2-inch wells. Well materials and annular materials installed at various depth intervals. See the graphic well construction diagram for specific depths.					

SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVN (ppm)	DEPTH (feet)				
8:34			0.5	5		0	CONCRETE, six inches thick.			
						1				
						2				
						3				
8:38			0.5	6		4	SANDY SILT, grayish brown (2.5Y 5/2), (5,50, 35,0), sand as fine grained, micaceous, non-plastic, very soft, moist.	ML		
			0.5	7		5				
						6				
						7				
8:38			0.5	3		8	SILTY SAND, grayish brown (2.5Y 5/2), (5,30,65,0), sand as fine grained, micaceous, very soft, moist.	SM		
			0.5	4		9				
						10				

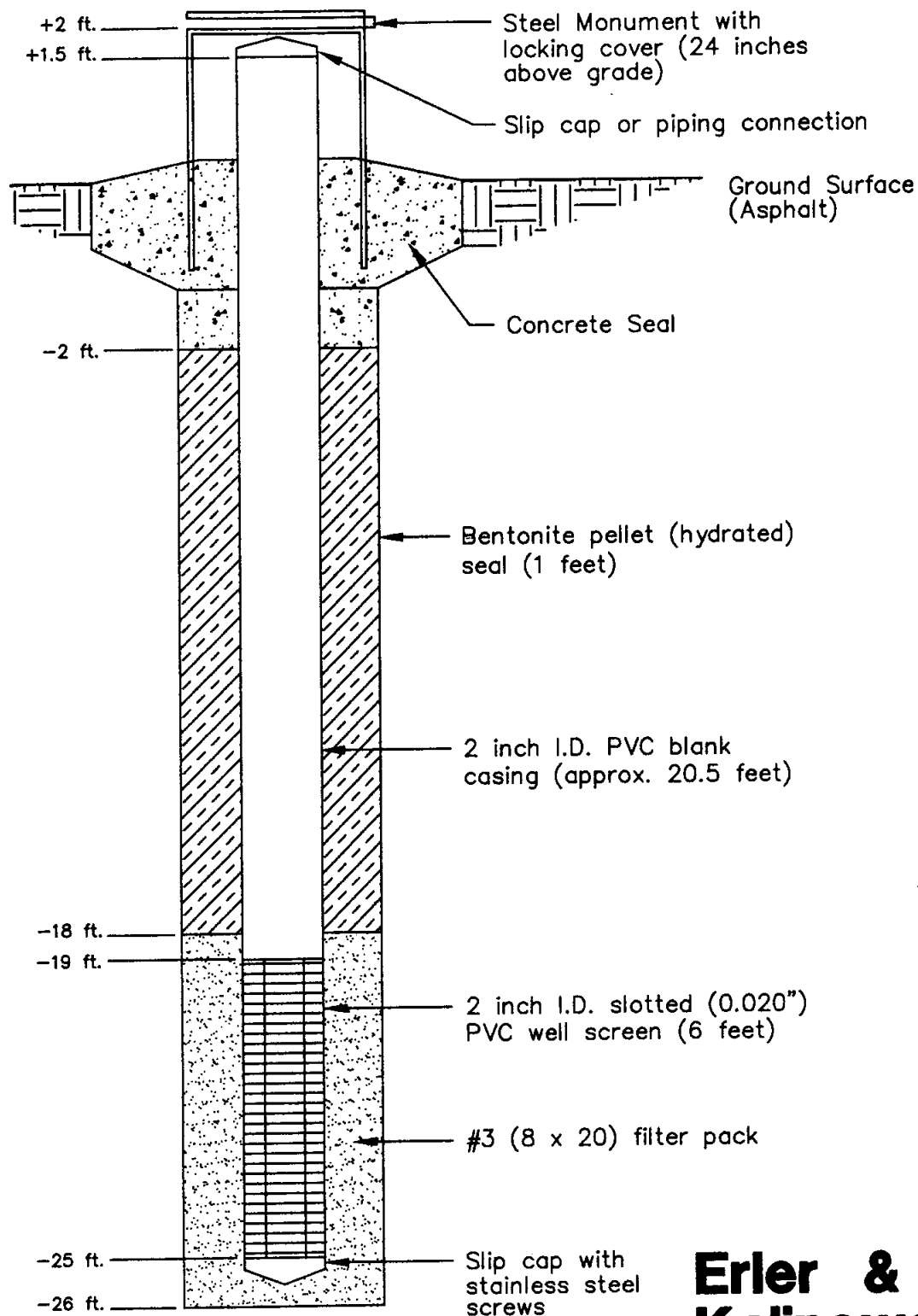
Boring & Well Construction Log

Erler & Kallnowski, Inc.

PROJECT NAME		Jervis B. Webb Company				PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-3/VMP-D2	
SAMPLES							MATERIAL DESCRIPTION AND DRILLING NOTES	USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION			
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)							
8:43			0.5	6		11	CLAYEY SILT, dark grayish brown (2.5Y 5/2), (30,60,10,0), sand as fine grained, micaceous, slightly plastic, soft, moist.	ML					
						12							
						13							
						14							
						15							
						16							
8:49			0	3		15	SILTY SAND, grayish brown (2.5Y 5/2), (15,30,55,0), sand as fine grained, micaceous, soft, moist.	SM					
			0.5	4		16							
			0.5	6		17							
9:01						18	SILTY CLAY, very dark gray (2.5Y 3/1), (50,35,15,0), sand as fine grained, micaceous, medium plasticity, soft to firm, moist.	CL					
						19							
						20							
9:06			0	3		20	SANDY SILT, grayish brown (2.5Y 5/2), (15,40,35,0), sand as fine grained, micaceous, soft, moist; stringer of silty sand at 21 feet for 3 inches.	ML					
			0.5	4		21							
			0.5	11		22							
9:10			0.3	4		21	SILTY CLAY, very dark gray (2.5Y 3/1), (55,30,15,0), sand as fine grained, micaceous, medium plasticity, soft to firm, moist.	CL					
			0.5	5		22							
			0.5	11		23							
9:10			0.5	3		23	SANDY SILT, dark grayish brown (2.5Y 4/2), (20,50,35,0), grades finer at 23.5 to 24.5 feet, sand as fine grained, soft to firm, moist; grades to silty clay.	ML					
			0.5	3		24							
			0.5	7		25							
9:10			0	5		24	SILTY CLAY, dark gray (2.5Y 4/1) with brown flecks (10YR 4/3), (50,35,15,0), sand as fine grained, medium plasticity, firm, moist.	CL					
			0	5		25							
			0.4	7		26							
						27							
						28							

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PROJECT NAME		Jervis B. Webb Company		PROJECT NUMBER		961025.04		BOREHOLE/ WELL NAME		SVE-3/VMP-D2	
TIME COLLECTED	SAMPLE NAME	SAMPLE TYPE	RECOVERY (feet)	BLOW COUNT	OVM (ppm)	DEPTH (feet)		USCS CODE	GRAPHIC LOG	WELL CONSTRUCTION	
9:25			0	5		29					
			0.5	7		30	CLAY, grayish brown (2.5Y 5/2), (65,30,5,0), micaceous, highly plastic, firm to hard, moist.	CL			
			0.5	8		31					
						32					
						33					
						34					
9:34			0	10		35	SAND, grayish brown (2.5Y 5/2), (5,15,80,0), sand as fine to medium grained, micaceous, poorly graded, loose, moist, grades to light brown at 36 feet.	SP			
			0.5	13		36					
			0.5	15		37					
						38					
						39					
9:40			0	5		40	SANDY SILT, very dark gray (2.5Y 3/1), (20,55,25,0), sand as fine grained, micaceous, non-plastic, moist to wet.	ML			
			0	7		41					
			0.3	11		42					
						43					
						44					
						45	End boring 45 feet.				



Erler & Kalinowski, Inc.

Well Completion Schematic for
Soil Vapor Extraction Wells
SVE-1, VMP-1, and VMP-2

Jervis B. Webb Company
South Gate, California

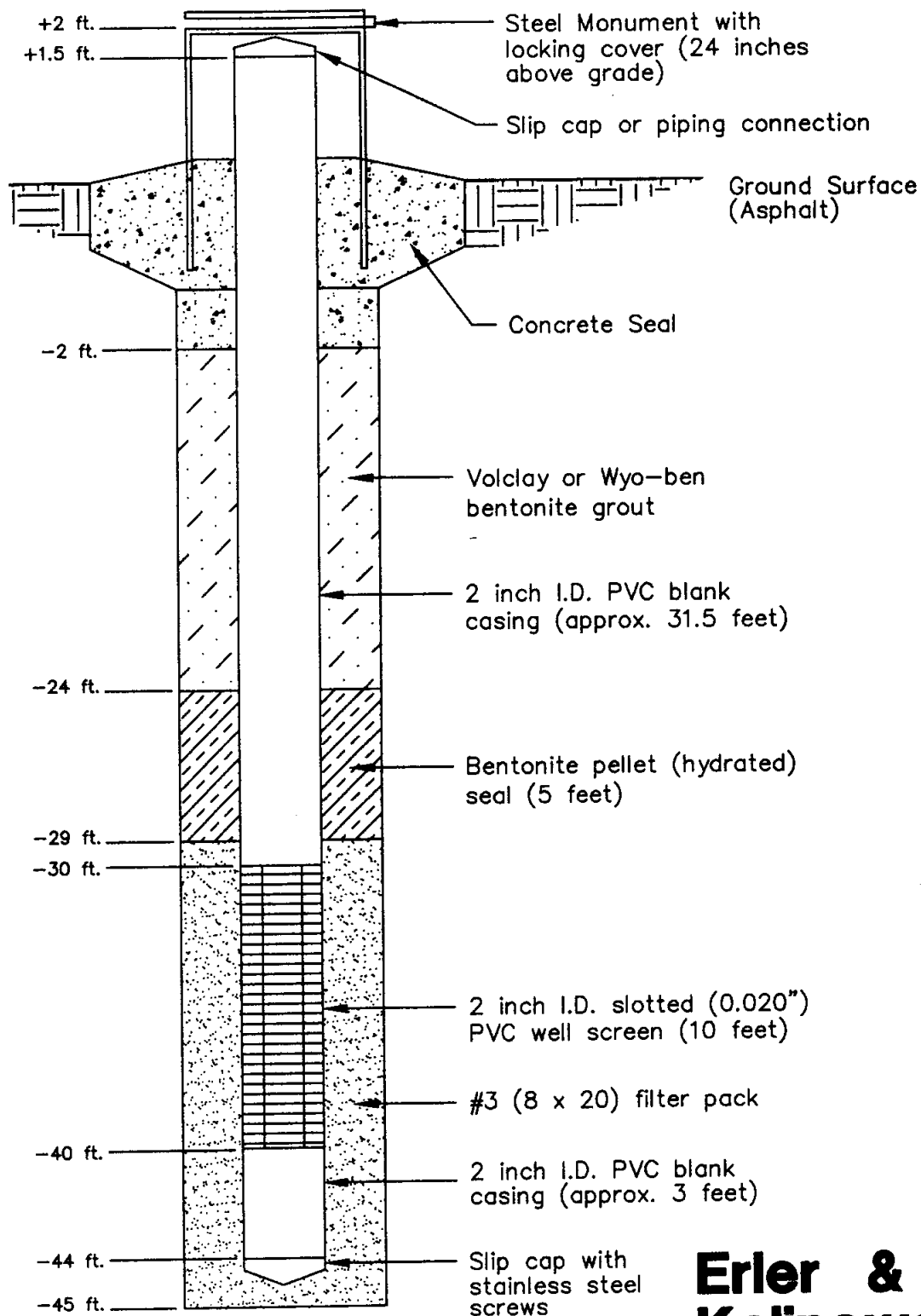
September 1999

EKI 961025.03

Figure 1

Notes

1. Approximate total depth of boring is 26 feet.
2. Not to Scale.



Erler & Kalinowski, Inc.

Well Completion Schematic for
Soil Vapor Extraction Well SVE-D1

Jervis B. Webb Company
South Gate, California

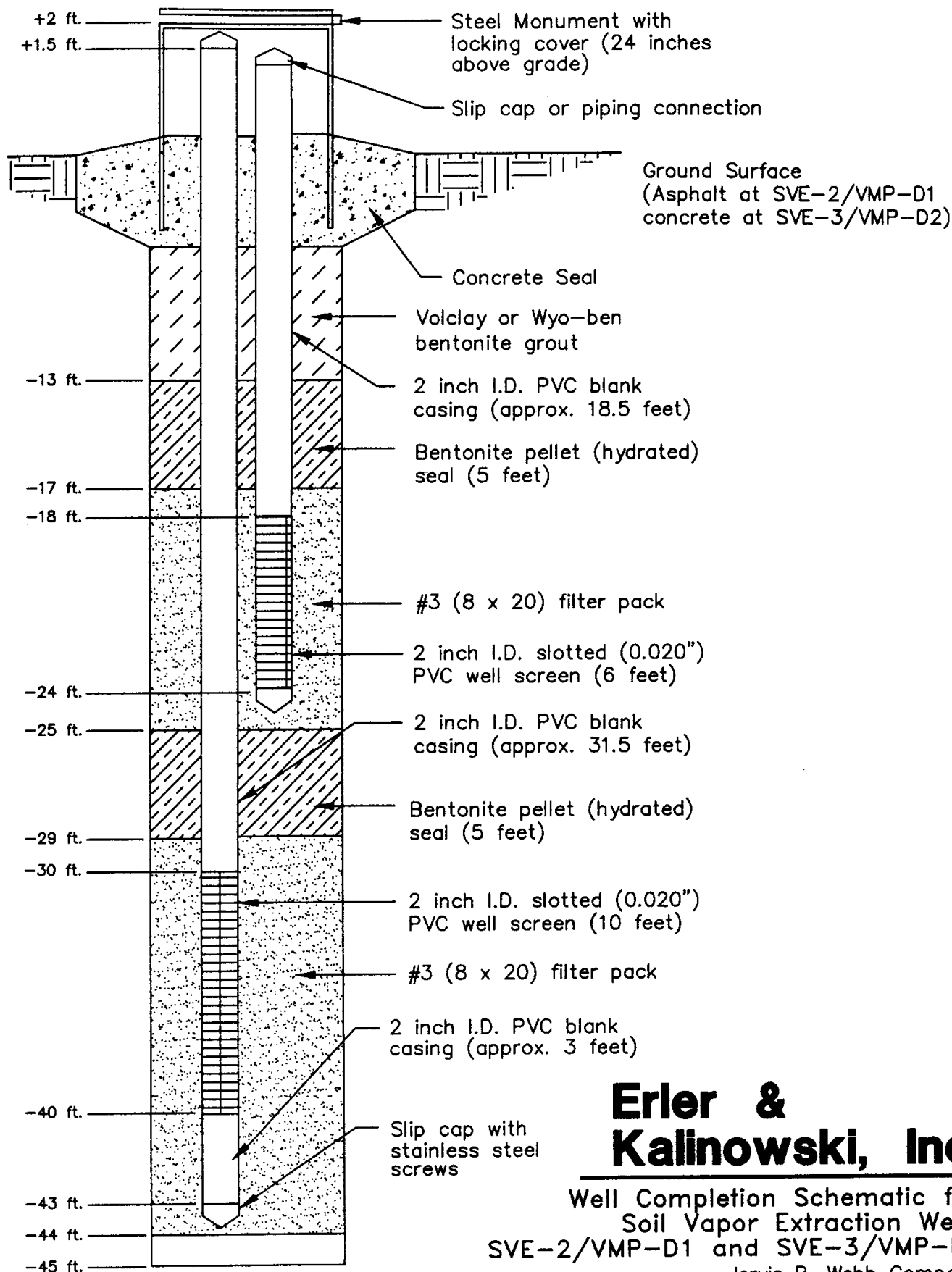
September 1999

EKI 961025.03

Figure 2

Notes

1. Approximate total depth of boring is 45 feet.
2. Not to Scale.



Erler & Kalinowski, Inc.

Well Completion Schematic for
Soil Vapor Extraction Wells
SVE-2/VMP-D1 and SVE-3/VMP-D2

Jervis B. Webb Company
South Gate, California

September 1999
EKL 961025.03

Figure 3

Notes

1. Approximate total depth of boring is 45 feet.
2. Not to Scale.